

# Work Order ID 62736

October 6, 2010 3:24:24 PM



Page 1

Item ID: D350-607-043A

Accept



Setup Start



Revision ID:

Stop



Item Name: Heli-Utility-Basket (Automatic Lid Opener)

Start Date: 10/06/10 Start Qty: 1.00



Cust Item ID:

Required Date: 10/12/10 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: ✓ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

Draw Nbr

Revision Nbr

D350-607-1

A

100

0.00



DC

DOCUMENT CONTROL

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPPD350-607-043A CHG001

5 10/10/12

HJ for BG 10-10-08

110

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

PULL FROM STOCK:  
1 X D350-607-043 B

61442

W 10-10-08

120

Small Fab

0.00



Small Fab

Memo

0.00

Small Fab

REMOVE PROP ARM D2332-041, RETURN TO STOCK B

60211

AM 470

POC

|   |                     |     |           |  |  |
|---|---------------------|-----|-----------|--|--|
| <b>DART</b><br>Dart Aerospace Ltd.<br>1270 ABERDEEN ST.<br>HAWKESBURY, ON, CANADA K6A 1K7 |                     |     |           | TC APPROVAL # 09-89<br>TEL: 1-613-632-5200 |  |
| P/N   | D350-607-043/-044   | CHG | CHG005    |  |  |
| DESC.   | Heli-Utility-Basket | STC | SH94-14   |  |  |
| LOT   | B61442              | STC | SR00213NY |  |  |
| MODEL   | AS350/355           | STC |           |  |  |

MADE IN CANADA

D2729-1

# Work Order ID 62736

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Item ID: D350-607-043A

Accept



Setup Start



Revision ID:

Stop



Item Name: Heli-Utility-Basket (Automatic Lid Opener)

Start Date: 10/06/10 Start Qty: 1.00



Cust Item ID:

Required Date: 10/12/10 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

121

0.00



Large Fab

Memo

0.00

Large Fab

GRIND FLUSH D2327-3 BUSHING  
TRIM STEEL MESH LOCALLY A/R  
TRANSFER DRILL 2 X 0.194 HOLES THRU BASKET LID SQUARE TUBE  
AND 2 X 0.194 HOLES THRU BASKET BASE SQUARE TUBE PER DETAIL  
S

*Cp 10.10.07*

122

0.00



HandFinish

Memo

0.00

Hand Finishing

TOUCH UP A/R

*ml 10 10 07 1*

123

0.00



QC

QC3- Inspect Part Finish

Memo

0.00

Quality Control

*8/10/10/08*

*7C*

**Work Order ID 62736**

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Item ID: D350-607-043A

Accept



Setup Start



Revision ID:

Stop



Item Name: Heli-Utility-Basket (Automatic Lid Opener)

Start Date: 10/06/10 Start Qty: 1.00



Cust Item ID:

Required Date: 10/12/10 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

140

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

ENSURE ORIGINAL KIT IS IN BOX

D350-607-241 B61354 CH201

150

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control



160

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D350-607-043A

USING NEW B/N

Location: \_\_\_\_\_

NEW

**Work Order ID 62736**

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Item ID: D350-607-043A

Accept



Setup Start



Revision ID:

Stop



Item Name: Heli-Utility-Basket (Automatic Lid Opener)

Start Date: 10/06/10 Start Qty: 1.00



Cust Item ID:

Required Date: 10/12/10 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

170

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/10/12

ME

10-10-12

# Picklist Print

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Page 1

Work Order ID: 62736

Parent Item: D350-607-043A

Parent Item Name: Heli-Utility-Basket (Automatic Lid Opener)

Start Date: 10/06/10

Required Date: 10/12/10

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevB: as per dwg revC DD 10.01.18 verified by:EC IPP RevC: as  
per dwg revC DD 10.01.18 verified by:EC IPP rev:D as per ecn10-  
545 DD 10.04.19 verified by:EC


| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|

|   |  |              |    |  |  |  |      |         |  |    |  |  |  |
|---|--|--------------|----|--|--|--|------|---------|--|----|--|--|--|
| D2332-041   |  | Manufactured | No |  |  |  | Each | 10.0000 |  | -1 |  |  |  |
|  |  |              |    |  |  |  |      |         |  |    |  |  |  |
| Lid Prop Assembly 6.69" long  |  |              |    |  |  |  |      |         |  |    |  |  |  |

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| ST512    | 10      |          |
| 60211    | 4       |          |
| 61222    | 6       |          |

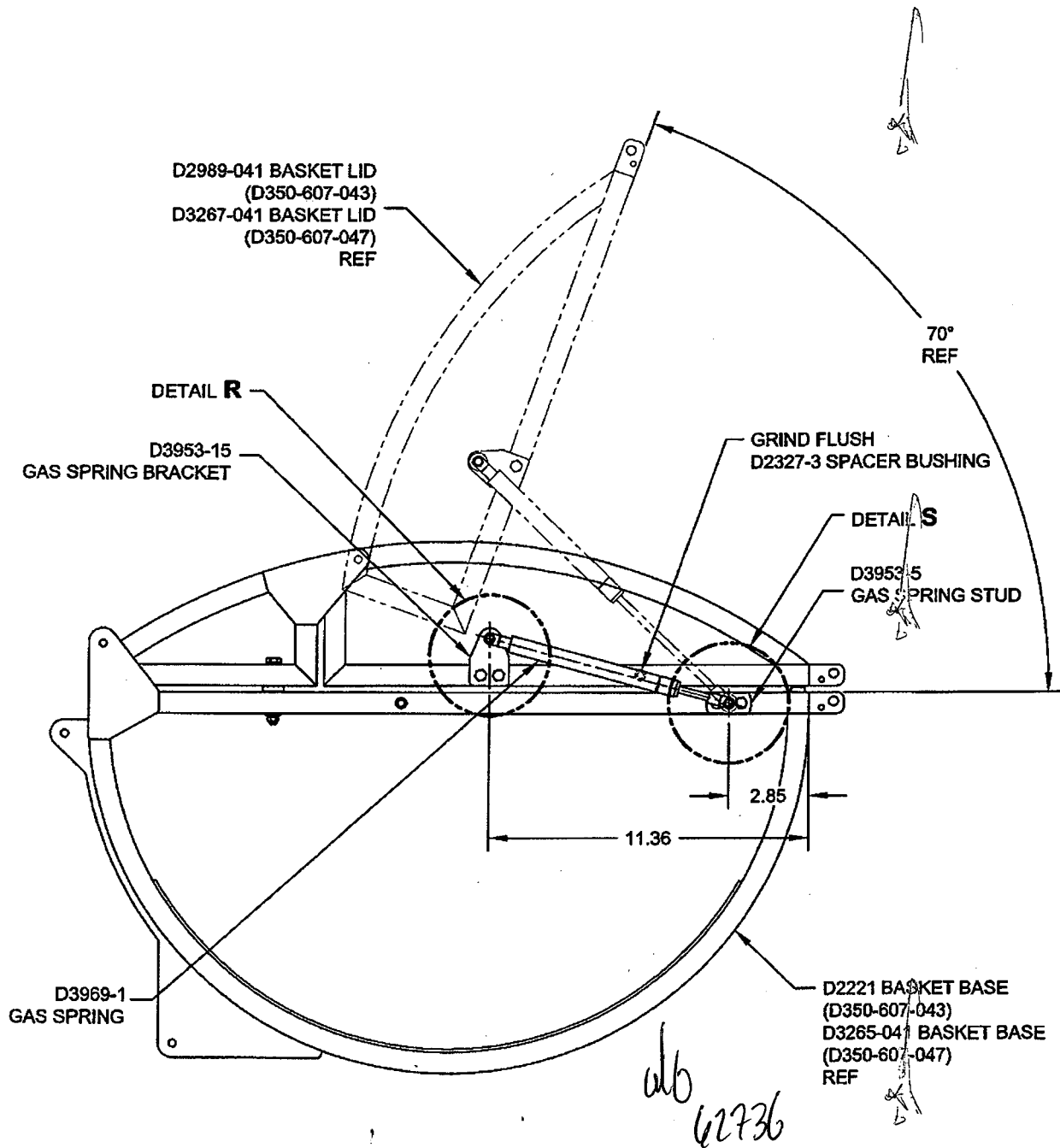
|   |  |              |    |  |  |  |      |        |  |  |  |  |  |
|---|--|--------------|----|--|--|--|------|--------|--|--|--|--|--|
| D350-607-043  |  | Manufactured | No |  |  |  | Each | 2.0000 |  |  |  |  |  |
|  |  |              |    |  |  |  |      |        |  |  |  |  |  |
| Heli-Utility-Basket   |  |              |    |  |  |  |      |        |  |  |  |  |  |

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FG       | 1       |          |
| 39328    | 1       |          |
| 61442    | 1       |          |

|   |  |              |    |  |  |     |      |        |   |   |  |  |  |
|---|--|--------------|----|--|--|-----|------|--------|---|---|--|--|--|
| D350-607-143  |  | Manufactured | No |  |  | 110 | Each | 1.0000 | 1 | 1 |  |  |  |
|  |  |              |    |  |  |     |      |        |   |   |  |  |  |
| Automatic Lid Opener Installation   |  |              |    |  |  |     |      |        |   |   |  |  |  |

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| 54041    | 1       |          |
|          | 1       |          |

B62734 (100)

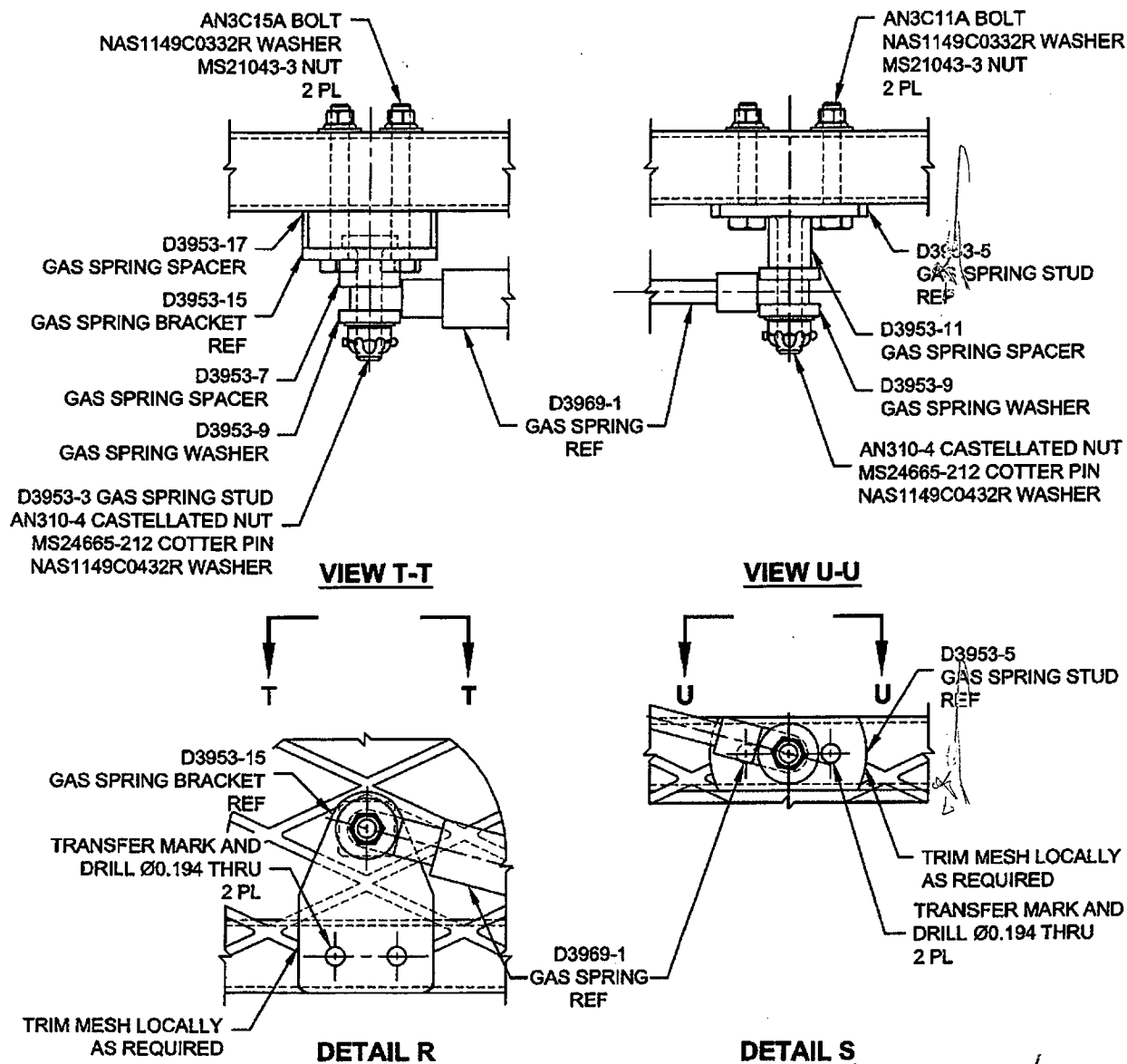


**D350-607-143 AUTOMATIC LID OPENER INSTALLATION**  
(1 END ONLY)

**Figure 9a – Automatic Lid Opener Installation**

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Revision: **A**  
Date: 10.03.10



62736

Figure 9b – Automatic Lid Opener Installation

## 2.0 GENERAL NOTES

### COMPATIBILITY

Compatibility of this installation with the aircraft is the responsibility of the installer. Ensure that this installation does not conflict with a previous modification.

### CONTINUING AIRWORTHINESS

This installation should be maintained in accordance with the Instructions for Continued Airworthiness ICA-D350-607.

## 3.0 INSTALLATION PROCEDURE

For installation of D350-607-041/-041A/-043/-043A/-045/-045A/-047/-047A Heli-Utility-Basket™.

- 3.1 **NOTE:** For aircraft equipped with high gear, the Dart Heli-Utility-Basket™ is compatible with Dart D350-591 high-gear steps. The D350-591 step height must be set as shown in Figure 1 to ensure that the cargo doors will open with the basket installed. For aircraft equipped with low gear, the Dart Heli-Utility-Basket™ is **not** compatible with Dart D350-591 low gear steps; any Dart low gear step will have to be removed before basket installation.
- 3.2 The D350-607-041/-043/-045/-047 Heli-Utility-Basket™ may be installed on either the LH or RH side of the aircraft. For RH installations, the D2332-041 Prop Assembly should be moved to the aft end of the basket. Use existing hardware and ensure nuts face aft.
- 3.3 Install the D2732-030 Rubber Cushions, D2230-1 Lugs and D2324 Strut onto the basket as shown in Figures 2 and 3, using the AN4 hardware shown.  
**NOTE:** The AN4-15A bolts may be replaced with a stainless steel positive locking quick release pin with a minimum double shear strength of 2400 lbs and with a 1.0 inch grip length and 0.25 inch diameter (Avibank: BLC4B10S, BLC4TA10S, BLC4R10S, BLC4LA10S; MS Number: MS17984C410, MS17985C410, MS17986C410, MS17987C410)
- 3.4 Present the basket to the crosstubes. Propping the basket at the appropriate height can facilitate installation. If the basket is being installed on high gear with Dart D350-591 steps, temporarily place a 0.063" (1.6mm) shim on the step and rest the basket on the shim. Remove shims after bolts are torqued.
- 3.5 Attach the basket with the D2230-3 Clamps and AN4 hardware shown in Figure 2 and 3. Leave bolts loose to allow for adjustment.
- 3.6 Tighten clamp bolts once height is positioned properly. Do not exceed torque of 60 in-lb (6.8 Nm) on the nuts. **CAUTION:** Over-torquing the nuts could lead to structural damage of the clamps.

## 4.0 INSTALLATION OF OPTIONAL KITS

### 4.1 D350-607-141 AUTOMATIC LID OPENER INSTL (FOR USE ON -041 BASKET)

**NOTE:** Once this modification is complete you will not be able to re-install the D2332-041 Prop Arm.

- 4.1.1 Remove the D2332-041 Prop Arm. *62736*
- 4.1.2 Grind Flush the D2327-3 Spacer Bushing on both ends of the Basket as shown in Figure 8a (it is permissible to grind all 4 Spacers Flush). Touch up paint Per ICA-D350-607 Section 5.1 Item 4.
- 4.1.3 Locate the D3953-1 Gas Spring Bracket as shown in Figure 8a. Trim Steel Mesh locally as required. Touch up paint per ICA-D350-607 Section 5.1 Item 4. Transfer mark and drill 2X Ø0.194 holes thru the Basket lid square tube structure as shown in Detail M. Install the D3953-1 Gas Spring Bracket & D3953-13 Gas Spring Spacer using 2X AN3C16A Bolt, 2X NAS1149C0332R Washer & 2X MS21043-3 NUT as Shown in View P-P.



- 4.1.4. Locate the D3953-5 Gas Spring Stud as shown in Figure 8a. Trim Steel Mesh locally as required. Touch up paint per ICA-D350-607 Section 5.1 Item 4. Transfer Mark and Drill 2X Ø0.194 holes thru the Basket base square tube structure as shown in Detail L. Fasten D3953-5 Gas Spring Stud using 2X AN3C11A Bolt, 2X NAS1149C0332R Washer & 2X MS21043-3 Nut.
- 4.1.5. Install 1X D3953-11 Gas Spring Spacer onto the D3953-5 Stud as shown in View N-N. Install the large end of the D3969-1 Gas Spring onto the D3953-5 Gas Spring Stud and Fasten in Place using 1X D3953-9 Gas Spring Washer, 1X NAS1149C0432R Washer, 1X AN310-4 Castellated Nut & 1X MS24665-212 Cotter Pin as shown in View N-N. Install Cotter Pin per MS33540 or AC43.13 chapter 7-127.
- 4.1.6. Insert the D3953-3 Gas Spring Stud into the D3953-1 Gas Spring Bracket & Insert the D3953-7 Gas Spring Spacer onto the D3953-3 Gas Spring as Shown in View P-P. Raise the Basket lid and install the rod end of the D3969-1 Gas Spring onto the D3953-3 Gas Spring Stud using 1X D3953-9 Gas Spring Washer, 1X NAS1149C0432R Washer, 1X AN310-4 Castellated Nut & 1X MS24665-212 Cotter Pin as shown in View P-P. Install Cotter Pin Per MS33540 or AC43.13 Chapter 7-127.
- NOTE:** The D3953-3 Gas Spring Stud can be held in place with a 9/16 open end spanner/wrench.
- NOTE:** With the lid in the closed position the Gas Spring should not be fully compressed.
- 4.1.7. Repeat steps 4.1.2 through 4.1.6 at the other end of the Basket.
- 4.1.8. Test the installation. If installed properly the Gas Springs should assist the Basket user in both opening and closing the basket lid.

#### 4.2 D350-607-143 AUTOMATIC LID OPENER INSTL (FOR USE ON -043/-047 BASKET)

**NOTE:** This kit may be installed at either end of the Basket. However, the Prop Arm must be removed in either case as it will interfere with the function of the Gas Spring.

- 4.2.1 Remove the D2332-041 Prop Arm.
- 4.2.2 Grind flush the D2327-3 Spacer Bushing on the end of the Basket where the lid opener is to be installed as shown in Figure 9a (it is permissible to grind all 4 spacers flush). Touch up paint per ICA-D350-607 Section 5.1 Item 4.
- 4.2.3 Locate the D3953-15 Gas Spring Bracket as shown in Figure 9a. Trim steel mesh locally as required. Touch up paint per ICA-D350-607 Section 5.1 Item 4. Transfer mark and drill 2X Ø0.194 holes thru the Basket Lid Square tube structure as shown in Detail R. Install the D3953-15 Gas Spring Bracket & D3953-17 Gas Spring Spacer using 2X AN3C15A BOLT, 2X NAS1149C0332R Washer & 2X MS21043-3 Nut as shown in View T-T. 62736
- 4.2.4 Locate the D3953-5 Gas Spring Stud as shown in Figure 9a. Trim Steel Mesh Locally as required. Touch up paint per ICA-D350-607 Sections 5.1 Item 4. Transfer mark and drill 2X Ø 0.194 holes thru the Basket Base square tube structure as shown in Detail S. Install 2X AN3C11A Bolt, 2X NAS1149C0332R Washer & 2X MS21043-3 Nut as shown in View U-U. Install the rod end of the D3969-1 Gas Spring onto the D3953-5 Gas Spring Stud using 1X D3953-9 Gas Spring washer 1X NAS1149C0432R Washer, 1X AN310-4 Castellated Nut & 1X MS24665-212 Cotter Pin as shown in View U-U. Install Cotter Pin per MS33540 or AC43.13 Chapter 7-127.
- 4.2.5 Insert the D3953-3 Gas Spring Stud into the D3953-15 Gas Spring Bracket & insert the D3953-7 Gas Spring Spacer onto the D3953-3 Gas Spring Stud as shown in View T-T. Raise the Basket lid and install the D3969-1 Gas Spring onto the D3953-3 Gas Spring Stud and fasten in place using 1X D3953-9 Gas Spring Washer 1X NAS1149C0432R Washer, 1X AN310-4 Castellated Nut & 1X MS24665-212 Cotter Pin as shown in View T-T. Install Cotter Pin per MS33540 OR AC43.13 Chapter 7-127.
- NOTE:** The D3953-3 Gas Spring Stud can be held in place with a 9/16 open end spanner/wrench.
- NOTE:** With the lid in the closed position the Gas Spring should not be fully compressed.